

OTHER NAMES:

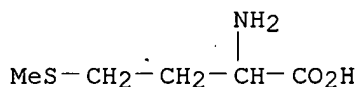
CN (.+-.)-Methionine  
 CN .alpha.-Amino-.gamma.-methylmercaptobutyric acid  
 CN Acimetion  
 CN Amurex  
 CN Banthionine  
 CN Cynaron  
 CN DL-2-Amino-4-(methylthio)butyric acid  
 CN Dyprin  
 CN Lactet  
 CN Lobamine  
 CN Meonine  
 CN Methilalanin  
 CN Metione  
 CN Neston  
 CN Pedameth  
 CN Racemethionine  
 CN Urimeth  
 FS 3D CONCORD  
 MF C5 H11 N O2 S  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS,

BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM\*, DIOGENES, EMBASE,  
 GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*,  
 MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS\*, TOXCENTER, TULSA,  
 ULIDAT, USAN, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



$$m=0$$

$$n=2$$

$$x = \text{COOR}^1$$

$$R^1 = H$$

$$y = \text{WR}^2\text{R}^3$$

$$R^2 = H$$

$$R^3 = H$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2871 REFERENCES IN FILE CA (1957 TO DATE)  
 63 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 2874 REFERENCES IN FILE CAPLUS (1957 TO DATE)  
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

= Formula,

- TI D-Methionine provides excellent protection from cisplatin  
ototoxicity in the rat.
- AN 1997:33825 BIOSIS
- DN PREV199799340228
- TI D-Methionine provides excellent protection from cisplatin  
ototoxicity in the rat.
- AU Campbell, Kathleen C. M. (1); Rybak, Leonard P.; Meech, Robert P.; Hughes,  
Larry
- CS (1) Div. Otolaryngology, Dep. Surgery, SIU Sch. Med., P.O. Box 19230,  
Springfield, IL 62794-1618 USA
- SO Hearing Research, (1996) Vol. 102, No. 1-2, pp. 90-98.  
ISSN: 0378-5955.
- DT Article
- LA English
- AB Cisplatin (CDDP) is a widely used chemotherapeutic agent. Unfortunately,  
CDDP is highly ototoxic. We tested D-methionine (D-Met), a  
sulfur containing compound, as an otoprotectant in male Wistar rats.  
Complete data sets were obtained for five groups of five animals each,  
including a treated control group (16 mg/kg CDDP), an untreated control  
group (administered an equivalent volume of saline) and three groups that  
received either 75, 150, or 300 mg/kg D-Met 30 min prior to the 16 mg/kg  
CDDP dosing. Auditory brainstem response (ABR) thresholds were obtained in  
response to clicks, and 1 kHz, 4 kHz, 8 kHz, and 14 kHz toneburst stimuli,  
before and 3 days after drug administration. Scanning electron microscopy  
(SEM) was used to examine the outer hair cells of the apical, middle and  
basal turns of the cochlea. Animal weight was measured on the first and  
final day. D-Met provided excellent otoprotection even at the lowest level  
with complete otoprotection obtained for the 300 mg/kg dosing as measured  
by both ABR and SEM. D-Met also markedly reduced weight loss and  
mortality. All animals receiving D-Met (15/15) survived to the end of the  
study period as opposed to only 5/10 of the treated controls.  
D-Methionine provides excellent protection from cisplatin  
ototoxicity in the rat.
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sulfur containing compound, as an otoprotectant in male Wistar rats.  
Complete data sets were obtained for five.
- IT Major Concepts
- IT Biochemistry and Molecular Biophysics; Nervous System (Neural  
Coordination); Pharmacology; Toxicology
- IT Chemicals & Biochemicals
- IT D-METHIONINE; CISPLATIN; METHIONINE
- IT Miscellaneous Descriptors
- IT ANALYTICAL METHOD; AUDITORY BRAINSTEM RESPONSE; CISPLATIN; D-  
METHIONINE; EAR DISEASE; MALE; METHIONINE;  
OTOOTOXICITY; PHARMACOLOGY; SCANNING ELECTRON MICROSCOPY; SENSE  
ORGANS; TOXICITY; TOXICOLOGY; TOXIN
- RN 348-67-4 (D-METHIONINE)  
15663-27-1 (CISPLATIN)  
63-68-3 (METHIONINE)